

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

Claims 1-13 are cancelled without prejudice.

Add new claims as follows:

14. (New) A process for removing material from a non-planar three-dimensional surface having an arbitrary shape, comprising the steps of:
 - associating a desired surface structure on a three-dimensional surface to at least one raster image which describes the surface structure; and
 - producing the surface structure on the three-dimensional surface through point-wise removal by a removal tool to thereby remove material layer-by-layer in correspondence to the raster image.
15. (New) The process of claim 14, wherein the removal tool is a laser.
16. (New) The process of claim 14, wherein the raster image comprises a two-dimensional map of the three-dimensional surface.
17. (New) The process of claim 14, wherein the raster image comprises a plurality of pixels.
18. (New) The process of claim 17, wherein a gray level is associated with a pixel.
19. (New) The process of claim 18, wherein the gray level associated with a pixel represents a depth of the surface structure, as measured from the non-planar three-dimensional surface.
20. (New) The process of claim 18, wherein the gray level associated with a pixel represents a depth of the material removed from the surface.

21. (New) The process of claim 18, wherein identical gray levels of the pixels indicate removal of a substantially identical quantity of material for each of the pixels having the identical gray level.
22. (New) The process of claim 18, wherein pixels having identical gray levels are associated with the same layer in the multi-layer removal process.
23. (New) The process of claim 22, wherein each layer is described by a plurality of adjoining polygons, said polygons describing the three-dimensional surface as a mathematical function.
24. (New) The process of claim 23, and further comprising controlling the removal tool in a three-dimensional coordinate system based on the mathematical function.
25. (New) The process of claim 23, wherein the removal tool removes material inside a polygon, when the polygon is associated with a gray level.
26. (New) The process of claim 25, wherein the removal tool removes the material inside the polygon by scanning the removal tool line-by-line across the polygon, said scan inside the polygon defining at least one machining surface.
27. (New) The process of claim 23, wherein the polygons of two superpositioned layers in the multi-layer removal process are placed so as not to have common edges by at least one of offsetting the polygons relative to one another, rotating the polygons with respect to one another, randomly arranging the polygons, or providing the polygons with different sizes.